

NISTTech

OPTICAL TRANSFORMER, PROCESS FOR MAKING AND USE OF SAME

NIST Docket No. 14-024

Abstract

<p>Resonant optical scanning systems are increasingly popular due to their performance characteristics: small size, large optomechanical field-of-view (FOW), and high frame rate image acquisition and display. A characteristic of a resonant scanning system is beam scan with displacement $x(t)=\sin(t)$, thus the scanned beam path is nonlinear across the FOW resulting in variation in pixel dwell time and displacement. We describe methods for optical linearization of variation in pixel dwell time and displacement. We describe methods for optical linearization of the beam scan by designing a lens system that adds positive/pincushion distortion to a beam scan.</p>

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Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

Last Modified: 09/24/2014